

State Agriculture Development Committee

September 22, 2010

Right to Farm

Agricultural Management Practice for the Construction, Installation and Operation of Solar Energy Generation Facilities, Structures and Equipment on Commercial Farms

2:76-2A.12 Agricultural management practice for the construction, installation and operation of solar energy generation facilities, structures and equipment on commercial farms

(a) Definitions. The following words and terms, as used in this section, shall have the following meanings.

“Conservation plan” means a site-specific plan that prescribes land treatment and related conservation and natural resources management measures that are deemed to be necessary, practical and reasonable for the conservation, protection, and development of natural resources, the maintenance and enhancement of agricultural or horticultural productivity, and the control and prevention of non-point source pollution. The conservation plan must address the soil and water resource concerns outlined in the National and State Resources Concerns and Quality Criteria (Section III) and Practice Standards (Section IV) of the Natural Resources Conservation Service NJ-Field Office Technical Guide (NRCS NJFOTG). The conservation plan filed must include a completed and NRCS-approved CPA-52 Environmental Evaluation Worksheet.

“Commercial farm” means

1. A farm management unit of no less than five acres producing agricultural or horticultural products worth \$2,500 or more annually, and satisfying the eligibility criteria for differential property taxation pursuant to the Farmland Assessment Act of 1964, N.J.S.A. 54:4-23.1 et seq.; or
2. A farm management unit less than five acres, producing agricultural or horticultural products worth \$50,000 or more annually and otherwise satisfying the eligibility criteria for differential property taxation pursuant to the Farmland Assessment Act of 1964, N.J.S.A. 54:4-23.1 et seq.

“Energy generation facilities, structures and equipment” means all the components of a solar energy generation system, including but not limited to panels, arrays, footings, supports, mounting and stabilization devices, inverters, electrical distribution and transmission wires, and other on-farm infrastructure necessary to operate the system.

“Occupy” means total area supporting the solar facilities, structure, equipment and related infrastructure as calculated by measuring the outside perimeter of the area encompassing the solar facilities, structures and equipment; permanent roadways, roadway easements servicing the energy generation facilities, structures and equipment; any other buildings or facilities deemed necessary for the production of energy on the farm; any areas of the farm where agricultural or horticultural use and production are restricted by the easement or otherwise due to operation of the energy generating facilities, structures and equipment; and any required vegetative buffer areas that are not in agricultural or horticultural production for purposes of screening the energy generation facilities, structures and equipment.

“Operator” means the person or entity that installs, owns or controls the energy facilities, structures and equipment.

“Owner” means owner of record of the commercial farm.

“Solar energy” means the generation of power or heat using a system that employs solar radiation.

(b) Right to Farm Act Compliance. The owner or operator of a commercial farm who is engaged in the generation of power or heat from solar energy shall comply with all requirements of N.J.S.A. 4:1C-9 and this subchapter for purposes of being afforded the benefits and protections of the Right to Farm Act, N.J.S.A. 4:1C-1 et seq.

(c) Mounting. The solar panels constructed, installed and operated on the farm shall be mounted in the following manner:

1. On buildings or structures; or
2. On the ground by a screw, piling or similar system that does not require a footing, concrete or other permanent mounting.
 - i. In the event that a licensed professional engineer responsible for designing the installation of the solar panels determines that based on soil conditions, depth to bedrock, wind velocity or any other pertinent siting considerations that the solar panels must be secured with concrete for purposes of compliance with federal or State laws or regulations, then section 2. above shall not apply.

(d) Farmland Assessment Eligibility. The owner shall provide evidence from the local tax assessor that the land used for energy generating facilities, equipment and structures shall be considered land in agricultural or horticultural use or actively devoted to agricultural or horticultural use for the purposes of the “Farmland Assessment Act of 1964”, c. 48 (C.54:4-23.1 et seq.).

(e) Pinelands. The construction, installation, or operation of any energy generation facility, structure, or equipment in the Pinelands area, as defined and regulated

by the “Pinelands Protection Act, P.L. 1979, c. 111 (C13:18A-1 et seq.), shall comply with the standards of P.L. 1070, c. 111, and the comprehensive management plan for the Pinelands area adopted pursuant to P.L. 1979, c. 111.

(f) Compliance with State and Federal Requirements. The construction, installation and operation of the energy generation facilities, structures and equipment shall conform to relevant and applicable federal and State laws and regulations, including but not limited to the Coastal Area Facilities Review Act (N.J.S.A. 13:19), Department of Environmental Protection Coastal Zone Management rules and the State Uniform Construction Code (N.J.A.C. 5:23 et seq.).

(g) Interconnection. The installation of the energy generation facilities, structures and equipment is subject to any applicable requirements of federal or State government for interconnection to the electrical transmission or distribution systems.

(h) Sound. Sound attributable to the solar energy generation facilities, structures and equipment shall not exceed a level of 30 decibels at any point on the property line of the commercial farm.

(i) Security. All inverters, transformers and such other system components that are designed to convert or modify electric current, or transmit electric flow to the transmission or distribution system, shall be secured by either of the following methods:

1. entirely contained within a structure, building, or steel cabinet secured with an operating lock; or
2. entirely contained within an area fenced with steel, including the area above the equipment, secured with an operating lock.

(j) Signs. There shall be no signs that are visible from any public road posted on the energy generation facilities, equipment and structures except for the manufacturer’s or installer’s identification, appropriate warning signs or owner identification.

(k) Treatment of Land within the Occupied Area. The use of geotextile fabrics, plastic, gravel, concrete or asphalt is prohibited within the area occupied by the energy generation facilities, structures and equipment, except for the following:

1. use of concrete pads for the mounting of control boxes and inverter and the use of concrete for securing the solar panels if determined necessary by a licensed professional engineer as described in (c) 2.i above;
2. the use of gravel within a contained area for the purpose of providing ballast;
3. the use of geotextile fabrics that are necessary for the production of agricultural or horticultural products;

4. the construction of temporary roadways as described in (s) 2. below,

(l) Maintenance of Occupied Area. Where it is not practicably feasible to utilize the area occupied by the energy generation facilities, structures and equipment for agricultural/horticultural production, the area shall be maintained in a vegetative cover and mowed on a regular basis or controlled to prevent weeds or other invasive species from growing or spreading to other areas of the property or surrounding properties.

(m) Prime Soils. The construction and installation of energy generation facilities, structures and equipment shall not be located on soils classified as prime farmland as determined by the United States Department of Agriculture, Natural Resources Conservation Service, to the maximum extent practicable.

(n) Site Disturbance. Site disturbance, including but not limited to, grading, soil removal, excavation, and soil compaction, shall be minimized so that the area occupied by the energy generating facilities, equipment and structures can readily be returned to active agricultural production after the useful life and removal of the energy generation facilities, equipment and structures.

(o) Setbacks and Buffering. Compliance with the following buffering standards is required:

1. Energy generation facilities, structures and equipment that are installed on the ground to service a particular building or structure shall be located in close proximity to that building or structure as practicable.

2. Energy generation facilities, structures and equipment shall be located in a way that minimizes view of the energy facilities, structures and equipment from public roads and surrounding properties, by utilizing natural buffers such as existing structures, trees and topography to the maximum extent practicable..

3. **Energy generation facilities, structures and equipment that are installed on the ground and occupy one acre or less of the commercial farm shall comply with the following setbacks:**

i. Located no less than 300 feet from an existing occupied residence not located on the property; and

ii. Located no less than 150 feet from the commercial farm's property boundary or an existing public road right-of-way.

4. **Energy generation facilities, structures and equipment that are installed on the ground and occupy greater than one acre of the commercial farm shall comply with the following setbacks and vegetative buffering requirements:**

i. Located no less than 300 feet from an existing occupied residence not located on the property, with vegetative buffering required if within 400 feet; and

ii. Located no less than 150 feet from a property boundary or an existing public road right-of-way, with vegetative buffering required if within 300 feet.

5. The installation of the vegetative screens shall comply with the aesthetic requirements of the conservation plan approved by the soil conservation district and implemented by the owner pursuant to C.54:4-23.3c.

i. The conservation plan shall address the following:

(1) The appropriate species and variety of vegetation to ensure that there is adequate screening throughout the year; and

(2) The appropriate height or caliper of the vegetation to be planted to ensure that there is a 75 percent screening of the energy generation facilities, equipment and structures within three years, and 100 percent screening within five years of completing the installation of the facilities.

(p) Height. Ground mounted solar arrays shall not exceed a height of 20 feet.

(q) Solar Reflection. The energy generation facilities, structures and equipment shall be constructed to avoid solar reflection on adjoining properties and roadways.

(r) Erosion. During the construction phase, the installer shall take appropriate measures to minimize dust and wind erosion.

(s) Roadways. The use of existing roads for access should be utilized to avoid the construction of new onsite roadways to the extent practicable.

1. Roadways within the occupied area shall be designed to minimize the extent of roadways constructed and associated soil compaction.

2. The temporary use of geotextile fabric and gravel for limited roadways during the construction phase is permitted provided that the geotextile fabric and gravel are removed following the construction phase.

(t) Abandonment. Energy generation facilities, structures and equipment shall be deemed abandoned in those instances when they are no longer being utilized for the purpose of producing energy for a period of 12 months.

1. The decommissioning of all energy generation facilities, equipment, structures and footings shall be subject to local ordinances.

2. The decommissioning of all energy generation facilities, equipment and structures shall be done in accordance with a conservation plan designed to address the impacts of the decommissioning process.

i. The conservation plan shall require, at a minimum, that all energy generation facilities, structures and equipment, including any subsurface wires, footings or other structures, shall be removed from the property. The restoration of the land shall be done in accordance with the conservation plan to achieve as much agricultural productivity of the soil as practicable.
